



2/19/04

+

Approved for use through 10/31/2002. OMB 0651-0031

U.S. Patent and Trademark Office; U.S. DEPARTMENT OF COMMERCE

Under the Paperwork Reduction Act of 1995, no persons are required to respond to a collection of information unless it contains a valid OMB control number.

Substitute for form 1449APTO

(use as many sheets as necessary)

Sheet	1	of	3
-------	---	----	---

Complete if Known

Application Number	10/783 480
Filing Date	February 19, 2004
First Named Inventor	Shibin JIANG
Group Art Unit	Unknown
Examiner Name	Unknown
Attorney Docket Number	NP-0074

U.S. PATENT DOCUMENTS

Examiner Initials*	Cite No. ¹	U.S. Patent Document		Name of Patentee or Applicant of Cited Document	Date of Publication of Cited Document MM-DD-YYYY	Pages, Columns, Lines, Where Relevant Passages or Relevant Figures Appear
		Number	Kind Code ² (if known)			
TW	1.	4,964,131		LIU et al.	10/16/1990	
	2.	4,578,793		KANE et al.	03/25/1986	
	3.	6,603,779	B2	PEDERSEN et al.	08/05/2003	
	4.	6,570,893	B1	LIBATIQUE et al.	05/27/2003	
	5.	6,567,432	B1	KIM et al.	05/20/2003	
	6.	6,510,167	B1	JAIN et al.	01/21/2003	
	7.	6,476,960	B1	TRAYNOR et al.	11/05/2002	
	8.	6,463,083	B1	SUMIYOSHI et al.	10/08/2002	
	9.	6,320,885	B1	KAWAI et al.	11/20/2001	
	10.	6,041,069		KASHYAP et al.	03/21/2000	
	11.	6,031,850		CHEO	02/29/2000	
	12.	6,018,534		PAN et al.	01/25/2000	
	13.	6,002,704		FREITAG et al.	12/14/1999	
	14.	5,991,314		IONOV et al.	11/23/1999	
	15.	5,905,745		GRUBB et al.	05/18/1999	
	16.	5,892,781		PAN et al.	04/06/1999	
	17.	5,843,073		SINOFSKY	12/01/1998	
	18.	5,617,244		PERCIVAL et al.	04/01/1997	
	19.	5,594,747		BALL	01/14/1997	
	20.	5,511,083		D'AMATO et al.	04/23/1996	

FOREIGN PATENT DOCUMENTS

[illegible]

**Examiner
Signature**

Tuan Hanger

Date Considered

212 / Ø6

***EXAMINER:** Initial if reference considered, whether or not citation is in conformance with MPEP 609. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.

¹ Unique citation designation number. ² See attached Kind of U.S. Patent Documents. ³ Enter Office that issued the document, by the two-letter code (WIPO Standard ST.3). ⁴ For Japanese patent documents, the indication of the year of the reign of the Emperor must precede the serial number of the patent document. ⁵ Kind of document by the appropriate symbols as indicated on the document under WIPO Standard ST. 18 if possible. ⁶ Applicant is to place a check mark here if English language Translation is attached.

Burden Hour Statement: This form is estimated to take 2.0 hours to complete. Time will vary depending upon the needs of the individual case. Any comments on the amount of time you are required to complete this form should be sent to the Chief Information Officer, U. S. Patent and Trademark Office, Washington, DC 20231. **DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. SEND TO:** Assistant Commissioner for Patents, Washington, DC 20231.

+

U.S. Patent and Trademark Office: U.S. DEPARTMENT OF COMMERCE

Under the Paperwork Reduction Act of 1995, no persons are required to respond to a collection of information unless it contains a valid OMB control number.

[illegible][illegible]

Examiner Signature	<i>Tram Nguyen</i>	Date Considered	2/2/06
-----------------------	--------------------	--------------------	--------

*EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.

¹ Unique citation designation number. ² See attached Kinds of U.S. Patent Documents. ³ Enter Office that issued the document, by the two-letter code (WIPO Standard ST.3). ⁴ For Japanese patent documents, the indication of the year of the reign of the Emperor must precede the serial number of the patent document. ⁵ Kind of document by the appropriate symbols as indicated on the document under WIPO Standard ST. 16 if possible. ⁶ Applicant is to place a check mark here if English language Translation is attached.

Burden Hour Statement: This form is estimated to take 2.0 hours to complete. Time will vary depending upon the needs of the individual case. Any comments on the amount of time you are required to complete this form should be sent to the Chief Information Officer, U. S. Patent and Trademark Office, Washington, DC 20231. **DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. SEND TO: Assistant Commissioner for Patents, Washington, DC 20231.**

Please type a plus sign (+) inside this box → ☐

PTO/SB/088 (08-00)

Approved for use through 10/31/2002. OMB 0651-0031

U. S. Patent and Trademark Office: U.S. DEPARTMENT OF COMMERCE

Under the Paperwork Reduction Act of 1995, no persons are required to respond to a collection of information unless it contains a valid OMB control number.

Substitute for form 1449B/PTO		Complete if Known	
INFORMATION DISCLOSURE STATEMENT BY APPLICANT (use as many sheets as necessary)		Application Number	
		Filing Date	February 19, 2004
		First Named Inventor	Shibin JIANG
		Group Art Unit	Unknown
		Examiner Name	Unknown
Sheet	3	of	3
		Attorney Docket Number	NP-0074

OTHER PRIOR ART – NON PATENT LITERATURE DOCUMENTS			
Examiner Initials*	Cite No. ¹	Include name of the author (in CAPITAL LETTERS), title of the article (when appropriate), title of the item (book, magazine, journal, serial, symposium, catalog, etc.), date, page(s), volume-issue number(s), publisher, city and/or country where published.	T ²
TN	28.	C. GHISLER et al., Tuning of a Tm3+-Ho3+-Silica Fiber Laser at 2 um, IEEE Journal fo Quantum Electronics, Vol. 31, No. 11, November 1995, Pgs. 1877-1879.	
	29.	J.Y. ALLAIN et al., Tuable CW Lasing Around 0-82, 1-48, 1-88 and 2.35 um In Thulium-Doped Fluorozirconate Fibre, Electronics Letters, November 23, 1989, Vol. 25, No. 24, Pgs. 1660-1662.	
	30.	W.A. CLARKSON et al., High-power cladding-pumped Tm-doped silica fiber laser with a wavelength tuning from 1860 to 2090 nm, Optics Letters, November 15, 2002, Vol. 27, No. 22, Pgs. 1989-1991.	
	31.	Stuart D. JACKSON et al., High-power diode-cladding-pumped Tm-doped silica fiber laser, Optics Letters, September 15, 1998, Vol. 23, No. 18, Pgs. 1462-1464.	
	32.	Ashraf F. EL-SHERIF et al., High-peak-power operation of a Q-switched Tm3+-doped silica fiber laser operating near 2um, Optics Letters, January 1, 2003, Vol. 28, No. 1, Pgs. 22-24.	
	33.	R.A. HAYWARD et al., Efficient cladding-pumped Tm-doped silica fibre laser with high power singlemode output at 2um, Electronics Letters, April 13, 2000, Vol. 36, No. 8, Pgs. 711-712.	
	34.	Stuart D. JACKSON et al., Dynamics of the output of heavily Tm-doped double-clad silica fiber lasers, J. Opt. Soc. Am., December 1999, Vol. 16, No. 12, Pgs. 2178-2188.	
	35.	Stuart D. JACKSON et al., CW Operation of a 1.064-um Pumped Tm-Ho-Doped Silica Fiber Laser, IEEE Journal of Quantum Electronics, September 1998, Vol. 34, No. 9, Pgs. 1578-1587.	
	36.	R.C. SHARP et al., 190-fs passively mode-locked thulium fiber laser with a low threshold, Optics Letters, June 15, 1996, Vol. 21, No. 12, Pgs. 881-883.	
	37.	Kyunghwan OH et al., Continuous-wave oscillation of thulium-sensitized holmium-doped silica fiber laser, Optics Letters, February 15, 1994, Vol. 19, No. 4, Pgs. 278-280.	
	38.	J.N. CARTER et al., CW Diode-Pumped Operation of 1-97 um Thulium-Doped Fluorozirconate Fibre Laser, Electronics Letters, April 26, 1990, Vol. 26, No. 9, Pgs. 599-601.	

Examiner Signature	<i>Tram Nguyen</i>	Date Considered	2/2/06
--------------------	--------------------	-----------------	--------

*EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.

¹ Unique citation designation number. ² Applicant is to place a check mark here if English language Translation is attached.

Burden Hour Statement: This form is estimated to take 2.0 hours to complete. Time will vary depending upon the needs of the individual case. Any comments on the amount of time you are required to complete this form should be sent to the Chief Information Officer, U. S. Patent and Trademark Office, Washington, DC 20231. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. SEND TO: Assistant Commissioner for Patents, Washington, DC 20231.